

ENGLISH

Placement – First Year

Time: Theory - 60 hours

Course Description: The Course is designed to enable students to enhance ability to comprehend spoken and written English (and use English) required for effective communication in their professional work. Students will practice their skills in verbal and written English during clinical and classroom experiences.

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	10	<ul style="list-style-type: none"> • Speak and Write grammatically Correct English • Review of Grammar 	<ul style="list-style-type: none"> • Remedial study of Grammar • Building Vocabulary • Phonetics • Public Speaking 	<ul style="list-style-type: none"> • Demonstrate use of dictionary • Class-room conversation • Exercise on use of Grammar • Practice in public speaking 	<ul style="list-style-type: none"> • Objective Type • Fill in the blanks • Para- phrasing
II	30	<ul style="list-style-type: none"> • Develop ability to read, understand and express meaningfully, the prescribed text. 	<ul style="list-style-type: none"> • Read and comprehend prescribed course books 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> ▪ Reading ▪ Summarizing ▪ Comprehension 	<ul style="list-style-type: none"> • Short Answers • Essay Types
III	10	<ul style="list-style-type: none"> • Develop writing skills 	<ul style="list-style-type: none"> • Various forms of composition <ul style="list-style-type: none"> ▪ Letter writing ▪ Note taking ▪ Precis writing ▪ Nurses notes ▪ Anecdotal records ▪ Diary writing ▪ Reports on health problems etc. ▪ Resume/CV 	<ul style="list-style-type: none"> • Exercises on writing; <ul style="list-style-type: none"> ▪ Letter writing ▪ Nurses Notes ▪ Precis ▪ Diary ▪ Anecdote ▪ Health problems ▪ Story writing ▪ Resume/CV • Essay writing <ul style="list-style-type: none"> ▪ Discussion on written reports/ documents 	<ul style="list-style-type: none"> • Assessment of the skills based on the check list
IV	6	<ul style="list-style-type: none"> • Develop skill in spoken English 	<ul style="list-style-type: none"> • Spoken English <ul style="list-style-type: none"> ▪ Oral report ▪ Discussion ▪ Debate ▪ Telephonic conversation 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> • Debating • Participating in Seminar, panel, symposium • Telephonic • Conversation 	<ul style="list-style-type: none"> • Assessment of the skills based on the check list
V	4	<ul style="list-style-type: none"> • Develop skill in listening comprehension 	<ul style="list-style-type: none"> • Listening Comprehension <ul style="list-style-type: none"> ▪ Media, audio, video, speeches etc. 	<ul style="list-style-type: none"> • Exercise on: <ul style="list-style-type: none"> ▪ Listening to audio, video tapes and identify the key points 	<ul style="list-style-type: none"> • Assessment of the skills based on the check list

ANATOMY

Placement– First Year

Time: Theory - 60 hours

Course Description: The Course is designed to enable students to acquire knowledge of the normal structure of various human body systems and understand the alterations in anatomical structures in disease and practice of nursing.

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	5	Describe the anatomical terms, organization of human body and structure of cell, tissues, membranes and glands.	Introduction to Anatomical terms organization of the human body <ul style="list-style-type: none"> Human Cell structure Tissues – Definition, Types, characteristics, classification, location, functions and formation Membranes and glands – classification and structure Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using charts, microscopic slides, Skeleton & torso Demonstrate cells, types of tissues membranes and glands Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
II	6	Describe the structure & function of bones and joints	The Skeletal System <ul style="list-style-type: none"> Bones- types, structure, Axial & Appendicular Skeleton, Bone formation and growth Description of bones Joints – classification and structure Alterations in disease Applications and implications in nursing 	<ul style="list-style-type: none"> Lecture discussion Explain using charts, skeleton, loose bones, and joints Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
III	7	Describe the structure and function of muscles	The Muscular System <ul style="list-style-type: none"> Types and structure of muscles Muscle groups Alterations in disease Applications and implications in nursing 	<ul style="list-style-type: none"> Lecture discussion Explain using chart, models and films Demonstrate muscular movements Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
IV	6	Describe the structure & function of nervous system	The Nervous System <ul style="list-style-type: none"> Structure of neurologia & neurons Somatic Nervous system <ul style="list-style-type: none"> Structure of brain, spinal cord, cranial nerves, spinal nerves, peripheral nerves Autonomic Nervous System- sympathetic, parasympathetic <ul style="list-style-type: none"> Structure, location <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
V	6	Explain the structure & functions of sensory organs	The Sensory Organs <ul style="list-style-type: none"> Structure of skin, eye, ear, nose, tongue, (Auditory and olfactory apparatus) Alterations in disease Applications and implications in nursing 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
VI	7	Describe the structure & function of circulatory and lymphatic system	Circulatory and lymphatic system <ul style="list-style-type: none"> The Circulatory System <ul style="list-style-type: none"> Blood – Microscopic structure Structure of Heart Structure of blood vessels–Arterial & Venous System, Circulation: systemic, pulmonary, coronary Lymphatic system <ul style="list-style-type: none"> Lymphatic vessels and lymph Lymphatic tissues <ul style="list-style-type: none"> Thymus gland Lymph nodes Spleen Lymphatic nodules <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
VII	5	Describe the structure & functions of respiratory system	The Respiratory System <ul style="list-style-type: none"> Structure of the organs of respiration Muscles of respiration: Intercostal and Diaphragm. Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
VIII	6	Describe the structure & functions of digestive system	The Digestive System <ul style="list-style-type: none"> Structure of Alimentary tract and accessory organs of digestion Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
IX	4	Describe the structure & functions of excretory system	The Excretory System (Urinary) <ul style="list-style-type: none"> Structure of organs of urinary System: Kidney, ureters, urinary bladder, urethra, structure of skin Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
X	4	Describe the structure & functions of endocrine system	The Endocrine System <ul style="list-style-type: none"> Structure of Pituitary, Pancreas, thyroid, Parathyroid, thymus and adrenal glands Alterations in disease. Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type
XI	4	Describe the structure and functions of reproductive system	The Reproductive system including breast <ul style="list-style-type: none"> Structure of female reproductive organs Structure of male reproductive organs. Structure of breast Alterations in disease Applications and implications in nursing 	<ul style="list-style-type: none"> Lecture discussion Explain using models, charts, slides, specimens Record book 	<ul style="list-style-type: none"> Short answer questions Objective type

PHYSIOLOGY

Placement – First Year

Time: Theory - 60 Hours

Course Description: The Course is designed to assist the students to acquire knowledge of the normal physiology of various human body systems and understand the alterations in physiology in diseases and practice of nursing.

Uni	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	4	Describe the physiology of cell, tissues, membranes and glands	Cell Physiology <ul style="list-style-type: none"> Tissue-formation, repair Membranes & glands-functions Alterations in disease Applications and implications in nursing 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Short answer questions Objective type
II	4	Describe the Bone formation and growth and movements of skeleton system	Skeletal System <ul style="list-style-type: none"> Bone formation & growth Bones – Functions and movements of bones of axial and appendicular skeleton, bone healing. Joints and joint movement Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, models and films Demonstration of joint movements 	<ul style="list-style-type: none"> Short answer questions Objective type
III	4	Describe the muscle movements and tone and demonstrate muscle contraction and tone	Muscular System <ul style="list-style-type: none"> Muscle movements, Muscle tone, Physiology of muscle contraction, levels and maintenance of posture Alterations in disease Applications and implications in nursing. 	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, models slides, specimen and films Demonstration of muscle movements, tone and contraction 	<ul style="list-style-type: none"> Short answer questions Objective type
IV	7	<ul style="list-style-type: none"> Describe the physiology of nerve stimulus, reflexes, brain, cranial and spinal nerves Demonstrate reflex action and stimulus 	Nervous System <ul style="list-style-type: none"> Functions of Neurologia & neurons Stimulus & nerve impulse-definitions and mechanism Functions of brain, spinal cord, cranial and spinal nerves Cerebrospinal fluid-Composition, circulation and function 	<ul style="list-style-type: none"> Lecture discussion Explain using, Charts, models and films Demonstrate nerve stimulus, reflex action, reflexes 	<ul style="list-style-type: none"> Short answer questions Objective type

Uni	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> Reflex arc, Reflex action and reflexes Autonomic functions- <ul style="list-style-type: none"> Pain: somatic, visceral, and referred Autonomic learning and biofeedback <p>Alterations in disease Applications and implications in nursing.</p>		
V	8	<ul style="list-style-type: none"> Describe the physiology of blood and functions of Heart Demonstrate blood cell count, coagulation, grouping, Hb.: BP and Pulse monitoring 	Circulatory System <ul style="list-style-type: none"> Blood formation, composition, blood groups, blood coagulation Haemoglobin: Structure, Synthesis and breakdown, Variation of molecules, estimation Functions of Heart, Conduction, Cardiac cycle, circulation- Principles, Control, factors influencing BP and Pulse <p>Alterations in disease. Applications and implications in nursing.</p>	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, films Demonstration of Blood cell count, coagulation, grouping, Haemoglobin estimation, Heart conduction system. Measurement of pulse, BP 	<ul style="list-style-type: none"> Short answer questions Objective type
VI	6	<ul style="list-style-type: none"> Describe the physiology and mechanisms of respiration Demonstrates spirometry 	The Respiratory System <ul style="list-style-type: none"> Functions of respiratory organs Physiology of respiration Pulmonary ventilation, Volume Mechanics of respiration Gaseous exchange in lungs Carriage of oxygen & carbon-dioxide Exchange of gases in tissues Regulation of respiration. <p>Alterations in disease Applications and implications in nursing</p>	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, films Demonstration of spirometry 	<ul style="list-style-type: none"> Short answer questions Objective type
VII	6	<ul style="list-style-type: none"> Describes the physiology of digestive system Demonstrates BMR 	The Digestive System <ul style="list-style-type: none"> Functions of organs of digestive tract. Movements of alimentary tract, Digestion in mouth, stomach, small intestines, Large intestines, Absorption of food. Functions of liver, gall bladder and pancreas Metabolism of carbohydrates, protein and fat 	<ul style="list-style-type: none"> Lecture discussion Explain using Charts, Films 	<ul style="list-style-type: none"> Short answer questions Objective type

Uni	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
VIII	5	Describe the physiology of excretory system	The Excretory System <ul style="list-style-type: none"> • Functions of kidneys, ureters, urinary bladder & urethra • Composition of urine • Mechanism of urine formation • Functions of skin • Regulation of body temperature • Fluid and electrolyte balance. Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, Films 	<ul style="list-style-type: none"> • Short answer questions • Objective type
IX	4	Describe the physiology of sensory organs	The Sensory Organs <ul style="list-style-type: none"> • Functions of skin, eye, ear, nose, tongue, Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films 	<ul style="list-style-type: none"> • Short answer questions • Objective type
X	5	Describe the physiology of endocrine glands	The Endocrine System <ul style="list-style-type: none"> • Functions of Pituitary, pineal body, thymus, Thyroid, parathyroid, pancreas, Suprarenal, Placenta and ovaries & Testes Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films • Demonstration of • BMR 	<ul style="list-style-type: none"> • Short answer questions • Objective type
XI	5	Describe the physiology of male and female reproductive system	The Reproductive System <ul style="list-style-type: none"> • Reproduction of cells – DNA, Mitosis, Meiosis, spermatogenesis, oogenesis. • Functions of female reproductive organs; Functions of breast, Female sexual cycle. • Introduction to embryology. • Functions of male reproductive organs, Male function in reproduction, Male fertility system. Alterations in disease Applications and implications in nursing	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films, models, specimens 	<ul style="list-style-type: none"> • Short answer questions • Objective type
XII	2	Describe the physiology of Lymphatic and Immunological System	Lymphatic and Immunological System <ul style="list-style-type: none"> • Circulation of lymph • Immunity <ul style="list-style-type: none"> ▪ Formation of T-cells and B cells ▪ Types of Immune response ▪ Antigens ▪ Cytokines ▪ Antibodies 	<ul style="list-style-type: none"> • Lecture discussion • Explain using Charts, films 	<ul style="list-style-type: none"> • Short answer questions • Objective type

NUTRITION

Placement: First Year

Time: Theory 60 hours

Course Description: The Course is designed to assist the students to acquire knowledge of nutrition for maintenance of optimum health at different stages of life and its application for practice of nursing.

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
I	4		Describe the Relationship between nutrition & Health.	Introduction <ul style="list-style-type: none"> Nutrition: <ul style="list-style-type: none"> History Concepts Role of nutrition in maintaining health Nutritional problems in India National nutritional policy Factors affecting food and nutrition: socio-economic, cultural, tradition, production, system of distribution, life-style and food habits etc. Role of food and its medicinal value Classification of foods Food standards Elements of nutrition: macro and micro Calorie, BMR 	<ul style="list-style-type: none"> Lecture Discussion Explaining using charts Panel discussion 	<ul style="list-style-type: none"> Short answer questions Objective type
II	2		Describe the classification, functions, sources and recommended daily allowances (RDA) of carbohydrates	Carbohydrates <ul style="list-style-type: none"> Classification Caloric value Recommended daily allowances Dietary sources. Functions Digestion, absorption and storage, metabolism of carbohydrates Malnutrition: Deficiencies and Over consumption 	<ul style="list-style-type: none"> Lecture discussion Explaining using charts 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
III	2		Describe the classification, functions, sources and recommended daily allowances (RDA) of Fats	Fats <ul style="list-style-type: none"> • Classification • Caloric value • Recommended daily allowances • Dietary sources. • Functions. • Digestion, absorption and storage, metabolism • Malnutrition: Deficiencies • and Over consumption 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts 	<ul style="list-style-type: none"> • Short answer questions • Objective type
IV	2		Describe the classification, functions, sources and recommended daily allowances (RDA) of Proteins	Proteins <ul style="list-style-type: none"> • Classification • Caloric value • Recommended daily allowances • Dietary sources. • Functions. • Digestion, absorption, metabolism and storage • Malnutrition: Deficiencies and Over consumption 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts 	<ul style="list-style-type: none"> • Short answer questions • Objective type
V	3		Describe the daily calorie requirement for different categories of people	Energy <ul style="list-style-type: none"> • Unit of Energy – Kcal • Energy requirements of different categories of people. • Measurements of energy. • Body Mass Index (BMI) and basic metabolism • Basal Metabolic Rate (BMR) –determination and factors affecting 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts • Exercise • Demonstration 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VI	4		Describe the classification, functions, sources and recommended daily allowances (RDA) of Vitamins	Vitamins <ul style="list-style-type: none"> • Classification • Recommended daily allowances • Dietary sources. • Functions. • Absorption, synthesis, metabolism storage and excretion • Deficiencies • Hypervitaminosis 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts 	<ul style="list-style-type: none"> • Short answer questions • Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
VII	4		Describe the classification, functions, sources and recommended daily allowances (RDA) of Minerals	Minerals <ul style="list-style-type: none"> • Classification • Recommended daily allowances • Dietary sources. • Functions. • Absorption, synthesis, metabolism storage and excretion • Deficiencies • Over consumption and toxicity 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VIII	3		Describe the sources, functions and requirements of Water & electrolytes	Water & electrolytes <ul style="list-style-type: none"> • Water: Daily requirement, regulation of water metabolism, distribution of body water, • Electrolytes: Types, sources, composition of body fluids • Maintenance of fluid & electrolyte balance • Over hydration, dehydration and water intoxication • Electrolyte imbalances 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using charts 	<ul style="list-style-type: none"> • Short answer questions • Objective type
IX	5	15	<ul style="list-style-type: none"> • Describe the Cookery rules and preservation of nutrients • Prepare and serve simple beverages and different types of foods 	Cookery rules and preservation of nutrients <ul style="list-style-type: none"> • Principles, methods of cooking and serving <ul style="list-style-type: none"> ▪ Preservation of nutrients • Safe Food handling-toxicity • Storage of food • Food preservation, food additives and its principles • Prevention of food adulteration Act (PFA) • Food standards • Preparation of simple beverages and different types of food 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session 	<ul style="list-style-type: none"> • Short answer questions • Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
X	7	5	Describe and plan balanced diet for different categories of people	Balanced diet <ul style="list-style-type: none"> • Elements • Food groups • Recommended Daily Allowance • Nutritive value of foods • Calculation of balanced diet for different categories of people • Planning menu • Budgeting of food • Introduction to therapeutic diets: Naturopathy –Diet 	<ul style="list-style-type: none"> • Lecture discussion • Explaining using Charts • Practice session • Meal planning 	<ul style="list-style-type: none"> • Short answer questions • Objective type
XI	4		Describe various national programmes related to nutrition Describe the role of nurse in assessment of nutritional status and nutrition education	Role of nurse in nutritional programmes <ul style="list-style-type: none"> • National programmes related to nutrition <ul style="list-style-type: none"> ▪ Vitamin A deficiency programme ▪ National iodine deficiency disorders (IDD) programme ▪ Mid-day meal programme ▪ Integrated child development scheme (ICDS) • National and International agencies working towards food/ nutrition <ul style="list-style-type: none"> ▪ NIPCCD, CARE, FAO, NIN, CFTRI (Central food technology and research institute) etc. • Assessment of nutritional status. • Nutrition education and role of nurse. 	<ul style="list-style-type: none"> • Lecture discussion • Explaining with Slide /Film shows • Demonstration of Assessment of nutritional status 	<ul style="list-style-type: none"> • Short answer questions • Objective type

BIOCHEMISTRY

Placement- First Year

Time: Theory - 30 Hours

Course Descriptions: The Course is designed to assist the students to acquire knowledge of the normal biochemical composition and functioning of human body and understand the alterations in biochemistry in diseases for practice of nursing.

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	3	<ul style="list-style-type: none"> Describe the structure, composition and functions of cell Differentiate between Prokaryote and Eukaryote cell Identify techniques of Microscopy 	Introduction <ul style="list-style-type: none"> Definition and significance in nursing Review of structure, Composition and functions of cell Prokaryote and Eukaryote cell organization Microscopy 	<ul style="list-style-type: none"> Lecture discussion using charts, slides Demonstrate use of microscope 	<ul style="list-style-type: none"> Short answer questions Objective type
II	6	Describe the Structure and functions of Cell membrane	Structure and functions of Cell membrane <ul style="list-style-type: none"> Fluid mosaic model tight junction, Cytoskeleton Transport mechanism: diffusion, osmosis, filtration, active channel, sodium pump Acid base balance maintenance & diagnostic tests <ul style="list-style-type: none"> PH buffers 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Short answer questions Objective type
III	6	Explain the metabolism of carbohydrates	Composition and metabolism of Carbohydrates <ul style="list-style-type: none"> Types, structure, composition and uses; <ul style="list-style-type: none"> Monosaccharides, Disaccharides, Polysaccharides, Oligosaccharides Metabolism <ul style="list-style-type: none"> Pathways of glucose: <ul style="list-style-type: none"> Glycolysis <ul style="list-style-type: none"> Gluconeogenesis: Cori's cycle, Tricarboxylic acid (TCA) cycle Glycogenolysis 	<ul style="list-style-type: none"> Lecture discussion Demonstration of blood glucose monitoring 	<ul style="list-style-type: none"> Short answer questions Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> o Pentose phosphate pathways (Hexose mono phosphate) ▪ Regulation of blood glucose level • Investigations and their interpretations 		
IV	4	Explain the metabolism of Lipids	Composition and metabolism of Lipids <ul style="list-style-type: none"> • Types, structure, composition and uses of fatty acids <ul style="list-style-type: none"> ▪ Nomenclature, Roles and Prostaglandins • Metabolism of fatty acid <ul style="list-style-type: none"> ▪ Breakdown ▪ Synthesis • Metabolism of triacylglycerol • Cholesterol metabolism <ul style="list-style-type: none"> ▪ Biosynthesis and its Regulation <ul style="list-style-type: none"> o Bile salts and bilirubin o Vitamin D o Steroid hormones • Lipoproteins and their functions: <ul style="list-style-type: none"> ▪ VLDLs- IDLs, LDLs and HDLs ▪ Transport of lipids ▪ Atherosclerosis • Investigations and their interpretations 	<ul style="list-style-type: none"> • Lecture discussion using charts • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type
V	6	Explain the metabolism of Amino acids and Proteins	Composition and metabolism of Amino acids and Proteins <ul style="list-style-type: none"> • Types, structure, composition and uses of Amino acids and Proteins • Metabolism of Amino acids and Proteins <ul style="list-style-type: none"> ▪ Protein synthesis, targeting and glycosylation ▪ Chromatography ▪ Electrophoresis ▪ Sequencing • Metabolism of Nitrogen <ul style="list-style-type: none"> ▪ Fixation and Assimilation ▪ Urea Cycle ▪ Hemes and chlorophylls • Enzymes and co-enzymes 	<ul style="list-style-type: none"> • Lecture discussion using charts • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> ▪ Classification ▪ Properties ▪ Kinetics and inhibition ▪ Control Investigations and their interpretations 		
VI	2	Describe types, composition and utilization of Vitamins & minerals	Composition of Vitamins and minerals <ul style="list-style-type: none"> • Vitamins and minerals: <ul style="list-style-type: none"> ▪ Structure ▪ Classification ▪ Properties ▪ Absorption ▪ Storage & transportation ▪ Normal concentration Investigations and their interpretations	<ul style="list-style-type: none"> • Lecture discussion using charts • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type
VII	3	Describe Immunochemistry	Immunochemistry <ul style="list-style-type: none"> • Immune response, • Structure and classification of immunoglobins • Mechanism of antibody production • Antigens: HLA typing. • Free radical and Antioxidants. • Specialised Protein: Collagen, Elastin, Keratin, Myosin, Lens Protein. • Electrophoretic and Quantitative determination of immunoglobins- ELISA etc. • Investigations and their interpretations 	<ul style="list-style-type: none"> • Lecture discussion using charts • Demonstration of laboratory tests 	<ul style="list-style-type: none"> • Short answer questions • Objective type

NURSING FOUNDATIONS

Placement: First Year

Time: Theory - 265 hours
Practical – 650 hours
(200 lab and 450 clinical)

Course Description: This course is designed to help the students to develop an understanding of the philosophy, objectives, theories and process of nursing in various Supervised Clinical settings. It is aimed at helping the students to acquire knowledge, understanding and skills in techniques of nursing and practice them in Supervised Clinical settings.

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	10	Describe the concept of health, illness and health care agencies	Introduction <ul style="list-style-type: none"> • Concept of Health: Health –Illness continuum • Factors influencing health • Causes and risk factors for developing illness • Body defences: Immunity and immunization • Illness and illness Behaviour • Impact of illness on patient and family • Health Care Services: Health Promotion and Prevention, Primary Care, Diagnosis, Treatment, Rehabilitation and Continuing Care • Health care teams • Types of health care agencies • Hospitals: Types, Organisation and Functions • Health Promotion and Levels of Disease Prevention • Primary health care and its delivery: Role of nurse 	<ul style="list-style-type: none"> • Lecture discussion • Visit to health care agencies 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
II	16	<ul style="list-style-type: none"> Explain concept and scope of nursing Describe values, code of ethics and professional conduct for nurses in India 	Nursing as a profession <ul style="list-style-type: none"> Definition and characteristics of a profession Nursing: <ul style="list-style-type: none"> Definition, concepts, philosophy, objectives Characteristics, nature and scope of nursing practice Functions of nurse Qualities of a nurse Categories of nursing personnel Nursing as a profession History of Nursing in India Values: Definition, Types, values Clarification and values in professional Nursing: Caring and Advocacy Ethics: <ul style="list-style-type: none"> Definition and Ethical Principles Code of ethics and professional conduct for nurses. 	<ul style="list-style-type: none"> Lecture discussion Case discussion Role plays 	<ul style="list-style-type: none"> Essay type Short answers Objective type
III	4	<ul style="list-style-type: none"> Explain the admission and discharge procedure Performs admission and discharge procedure 	Hospital admission and discharge <ul style="list-style-type: none"> Admission to the hospital <ul style="list-style-type: none"> Unit and its preparation admission bed Admission procedure Special considerations Medico-legal issues Roles and responsibilities of the nurse Discharge from the hospital <ul style="list-style-type: none"> Types: Planned discharge, LAMA and abscond, Referrals and transfers Discharge Planning Discharge procedure Special considerations Medico-legal issues 	<ul style="list-style-type: none"> Lecture discussion Demonstration Lab Practice Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type Assess skills with check list Clinical practical examination

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> Roles & responsibilities of the nurse Care of the unit after discharge. 		
IV	10	<ul style="list-style-type: none"> Communicate effectively with patient, families and team members and maintain effective human relations (projecting professional image) Appreciate the importance of patient teaching in nursing 	Communication and Nurse patient relationship <ul style="list-style-type: none"> Communication: Levels, Elements, Types, Modes, Process, Factors influencing Communication <ul style="list-style-type: none"> Methods of Effective Communication, <ul style="list-style-type: none"> Attending skills Rapport building skills Empathy skills Barriers to effective communication, Helping Relationships (NPR): Dimensions of Helping Relationships, Phases of a helping relationship Communicating effectively with patient, families and team members and maintain. effective human relations with special reference to communicating with vulnerable group (children, women, physically & mentally challenged and elderly) Patient Teaching: Importance, Purposes, Process, role of nurse and Integrating teaching in Nursing Process 	<ul style="list-style-type: none"> Lecture discussion Role play and video film on the nurses interacting with the patient Practice session on patient teaching Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type
V	15	<ul style="list-style-type: none"> Explain the concept, uses, format and steps of nursing process Documents nursing process as per the format 	The Nursing Process <ul style="list-style-type: none"> Critical Thinking and Nursing Judgment <ul style="list-style-type: none"> Critical Thinking: Thinking and Learning, Competencies, Attitudes for Critical Thinking, Levels of critical thinking in Nursing 	<ul style="list-style-type: none"> Lecture discussion Demonstration Exercise Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> • Nursing Process Overview: Application in Practice <ul style="list-style-type: none"> ▪ Nursing process format: INC, current format Assessment o Collection of Data: Types, Sources, Methods o Formulating Nursing judgment: Data interpretation <ul style="list-style-type: none"> ▪ Nursing diagnosis o Identification of client problems o Nursing diagnosis statement o Difference between medical and nursing diagnosis • Planning <ul style="list-style-type: none"> ▪ Establishing Priorities ▪ Establishing Goals and Expected Outcomes, ▪ Selection of interventions: Protocols and standing Orders ▪ Writing the Nursing Care Plan • Implementation <ul style="list-style-type: none"> ▪ Implementing the plan of care • Evaluation <ul style="list-style-type: none"> ▪ Outcome of care ▪ Review and Modify • Documentation and reporting 		
VI	4	Describe the purposes, types and techniques of recording and reporting	Documentation and Reporting <ul style="list-style-type: none"> • Documentation: Purposes of Recording and reporting • Communication within the Health Care Team, • Types of records; ward records, medical/nursing records, • Common Record-keeping forms, computerized documentation 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice Session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> Guidelines for Reporting: Factual Basis, Accuracy, Completeness, currentness, Organization, confidentiality Methods of Recording, Reporting: Change-of shift reports: Transfer reports, Incident reports Minimizing legal Liability through effective record keeping 		
VII	15	<ul style="list-style-type: none"> Describe principles and techniques of monitoring and maintaining vital signs Monitor and maintain vital signs 	Vital signs <ul style="list-style-type: none"> Guidelines for taking vital signs: Body temperature: <ul style="list-style-type: none"> Physiology, Regulation, Factors affecting body temperature, Assessment of body temperature: sites, equipments and technique, special considerations Temperature alterations: Hyperthermia, Heatstroke, Hypothermia Hot and cold applications Pulse: <ul style="list-style-type: none"> Physiology and Regulation, Characteristics of the pulse, Factors affecting pulse Assessment of pulse: sites, location, equipments and technique, special considerations Alterations in pulse: Respiration: <ul style="list-style-type: none"> Physiology and Regulation, Mechanics of breathing, Characteristics of the respiration, Factors affecting respiration 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type Assess with check list and clinical practical examination

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> Assessment of respirations: technique, special considerations <ul style="list-style-type: none"> Alterations in respiration Blood pressure: <ul style="list-style-type: none"> Physiology and Regulation, Characteristics of the blood pressure, Factors affecting blood pressure Assessment of blood pressure: sites, equipments and technique, special considerations Alterations in blood pressure Recording of vital signs 		
VIII	30	<ul style="list-style-type: none"> Describe purpose and process of health assessment Describe the health assessment of each body system Perform health assessment of each body system 	Health assessment <ul style="list-style-type: none"> Purposes Process of Health assessment <ul style="list-style-type: none"> Health history Physical examination: <ul style="list-style-type: none"> Methods- Inspection, Palpation, Percussion, Auscultation, Olfaction Preparation for examination: patient and unit General assessment Assessment of each body system Recording of health assessment 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice on simulators Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type
IX	5	Identifies the various machinery, equipment and linen and their care	Machinery, Equipment and linen <ul style="list-style-type: none"> Types: Disposables and re-usable- Linen, rubber goods, glass ware, metal, plastics, furniture, machinery Introduction: <ul style="list-style-type: none"> Indent Maintenance Inventory 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Essay type Short answers Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
X	60	<ul style="list-style-type: none"> Describe the basic, physiological and psychosocial needs of patient Describe the principles and techniques for meeting basic, Physiological and psychosocial needs of patient Perform nursing assessment, plan, implement and evaluate the care for meeting basic, physiological and psychosocial needs of patient 	Meeting needs of patient <ul style="list-style-type: none"> Basic needs (Activities of daily living) <ul style="list-style-type: none"> Providing safe and clean environment: <ul style="list-style-type: none"> Physical -environment: Temperature, Humidity, Maintenance of normal Noise, Ventilation, light, Odour, pests control Reduction of Physical hazards: fire, accidents Safety devices: Restraints, side rails, airways, trapez etc. Role of nurse in providing safe and clean environment Hygiene: - Factors Influencing Hygienic Practice Hygienic care: Care of the Skin-Bath and pressure points, feet and nail, Oral cavity, Hair Care, Eyes, Ears, and Nose. - Assessment, Principles, Types, Equipments, Procedure, Special Considerations Patient environment: Room Equipment and linen making patient beds -Types of beds and bed making <ul style="list-style-type: none"> Comfort: - Factors Influencing Comfort Comfort devices Physiological needs: <ul style="list-style-type: none"> Sleep and Rest: <ul style="list-style-type: none"> Physiology of sleep Factors affecting sleep Promoting Rest and sleep Sleep Disorders <ul style="list-style-type: none"> Nutrition: - 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice sessions Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type Assess with check list & clinical practical examination

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> o Importance o Factors affecting nutritional needs o Assessment of nutritional needs: Variables o Meeting Nutritional needs: Principles, equipments, procedure and special considerations <ul style="list-style-type: none"> - Oral Enteral: Naso/ Orogastric, gastrostomy - Parenteral: o Urinary Elimination o Review of Physiology of Urine Elimination, Composition and characteristics of urine o Factors Influencing Urination o Alteration in Urinary Elimination o Types and Collection of urine specimen: Observation, urine testing o Facilitating urine elimination: assessment, types, equipments, procedures and special considerations <ul style="list-style-type: none"> - Providing urinal/bed pan - Condom drainage - Perineal care - Catheterization - Care of urinary drainage - Care of urinary diversions - Bladder irrigation ▪ Bowel Elimination o Review of Physiology of Bowel Elimination, Composition and characteristics of faeces 		

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> o Factors affecting Bowel elimination o Alteration in Bowel Elimination o Types and Collection of specimen of faeces: Observation o Facilitating bowel elimination: assessment, equipments, procedures and special considerations <ul style="list-style-type: none"> - Passing of Flatus tube - Enemas - Suppository - Sitz bath - Bowel wash - Care of Ostomies ▪ Mobility and Immobility o Principles of Body Mechanics o body Alignment and mobility o Factors affecting body Alignment and mobility o Hazards associated with immobility o Alteration in body Alignment and mobility o Nursing interventions for impaired Body Alignment and Mobility: assessment, types, devices used, method and special considerations, rehabilitation aspects <ul style="list-style-type: none"> - Range of motion exercises - Maintaining body alignment: Positions - Moving - Lifting - Transferring - Walking - Restraints ▪ Oxygenation 		

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> o Review of Cardiovascular and respiratory Physiology o Factors Affecting Oxygenation o Nursing interventions in oxygenation: assessment, types, equipment used, procedure and special considerations <ul style="list-style-type: none"> - Maintenance of patent airway - Oxygen administration - Suction - Inhalations: dry and moist - Chest physiotherapy and postural drainage - Care of Chest drainage - Pulse oximetry - CPR - Basic life support ▪ Fluid, Electrolyte, and Acid <ul style="list-style-type: none"> - Base Balances Review of Physiological o Regulation of Fluid, Electrolyte, and Acid <ul style="list-style-type: none"> - Base Balances Factors Affecting Fluid, Electrolyte, and Acid - Base Balances o Alterations in Fluid, Electrolyte, and Acid <ul style="list-style-type: none"> - Base Balances o Nursing interventions in Fluid, Electrolyte, and Acid <ul style="list-style-type: none"> - Base Imbalances: assessment, types, equipment, procedure and special considerations - Measuring fluid intake and output - Correcting Fluid, Electrolyte Imbalance: 		

	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> ▪ Replacement of fluids: Oral and Parenteral-Veni-puncture, regulating IV Flow rates, changing IV solutions and tubing, Changing IV dressing, ▪ Administering Blood transfusion ▪ Restriction of fluids • Psychosocial Needs <ul style="list-style-type: none"> ▪ Concepts of Cultural Diversity, Stress and Adaptation, Self-concept, Sexuality, Spiritual Health, Coping with loss, death and grieving ▪ Assessment of psychosocial needs ▪ Nursing intervention for psychosocial need ○ Assist with coping and adaptation. ○ Creating therapeutic environment. Recreational and diversional therapies 		
XI	20	Describe principles and techniques for infection control and biomedical waste management in Supervised Clinical settings	Infection control in Clinical settings <ul style="list-style-type: none"> • Infection control <ul style="list-style-type: none"> ▪ Nature of infection ▪ Chain of infection transmission ▪ Defenses against infection: natural and acquired ▪ Hospital acquired infection (Nosocomial infection) • Concept of asepsis: medical asepsis, and surgical asepsis • Isolation precautions (Barrier nursing): 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session • Supervised Clinical practice 	

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> ▪ Hand washing: simple, hand antisepsis and surgical antisepsis (scrub) ▪ Isolation: source and protective ▪ Personal protecting equipments: types, uses and technique of wearing and removing. ▪ Decontamination of equipment and unit ▪ Transportation of infected patients ▪ Standard safety precautions (Universal precautions) ▪ Transmission based precautions • Biomedical waste management: <ul style="list-style-type: none"> ▪ Importance ▪ Types of hospital waste ▪ Hazards associated with hospital waste ▪ Decontamination of hospital waste ▪ Segregation and Transportation & disposal 		
XII	40	<ul style="list-style-type: none"> • Explain the principles, routes, effects of administration of medications • Calculate conversions of drugs and dosages within and between systems of measurements 	Administration of Medications <ul style="list-style-type: none"> • General Principles/ Considerations <ul style="list-style-type: none"> ▪ Purposes of Medication ▪ Principles: 5 rights, Special Considerations, Prescriptions, Safety in Administering Medications and Medication Errors ▪ Drug forms ▪ Routes of administration ▪ Storage and maintenance of drugs and Nurses responsibility 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Practice session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type • Assess with check list and clinical practical examination

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
		<ul style="list-style-type: none"> Administer drugs by the following routes-oral, Intradermal, Subcutaneous Intramuscular, Intra Venous topical, inhalation 	<ul style="list-style-type: none"> Broad classification of drugs Therapeutic Effect, Side Effects, Toxic Effects, Idiosyncratic Reactions, Allergic Reactions, Drug Tolerance, Drug Interactions, Factors Influencing drug Actions, Systems of Drug Measurement: Metric System, Apothecary System, Household Measurements, Solutions. Converting Measurements Units: Conversion within one system, Conversion between systems, Dosage Calculation, Terminologies and abbreviations used in prescriptions of medications Oral Drugs Administration: Oral, Sublingual and Buccal: Equipment, procedure Parenteral <ul style="list-style-type: none"> General principles: decontamination and disposal of syringes and needles Types of parenteral therapies Types of syringes, needles, cannula, and infusion sets Protection from Needle-stick Injuries : Giving Medications with a safety syringes Routes of parenteral therapies 		

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> o Intradermal: purpose, site, equipment, procedure, special considerations o Subcutaneous: purpose, site, equipment, procedure, special considerations o Intramuscular : purpose, site, equipment, procedure, special considerations o Intra Venous: purpose, site, equipment, procedure, special considerations o Advanced techniques: epidural, intrathecal, intraosseous, intraperitoneal, intrapleural, intraarterial- Role of nurse • Topical Administration: purposes, site, equipment, procedure, special considerations for <ul style="list-style-type: none"> ▪ Application to Skin ▪ Application to mucous membrane o Direct application of liquids-Gargle and swabbing the throat into body cavity: Suppository/ medicated packing in rectum/ vagina o Irrigations: Eye, Ear, Bladder, Vaginal & Rectal o Spraying: Nose & throat o Insertion of Drug • Inhalation: Nasal, oral, endotracheal/ tracheal (steam, oxygen and medications)- 		

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<p>purposes, types, equipment, procedure, special considerations</p> <p>Recording and reporting of medications administered</p>		
XIII	10	<ul style="list-style-type: none"> Describe the pre and post-operative care of patients Explain the process of wound healing Explain the principles and techniques of wound care Perform care of wounds 	<p>Meeting needs of Perioperative patients</p> <ul style="list-style-type: none"> Definition and concept of Perioperative Nursing • Preoperative Phase <ul style="list-style-type: none"> Preparation of patient for surgery Intraoperative <ul style="list-style-type: none"> Operation theatre Set up and environment Role of nurse Postoperative Phase <ul style="list-style-type: none"> Recovery unit Post-operative unit Post-operative care, Wounds: types, Classifications, wound Healing Process, Factors affecting Wound, Complications of Wound Healing Surgical asepsis Care of the wound: types, equipments, procedure and special considerations <ul style="list-style-type: none"> Dressings, Suture Care, Care of Drainage Application of Bandages, Binders, Splints & Slings Heat and Cold Therapy 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice session Supervised Clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type Assess with check list and clinical practical examination
XIV	15	Explain care of patients having alterations in body functioning	<p>Meeting special needs of the patient</p> <ul style="list-style-type: none"> Care of patients having alteration in <ul style="list-style-type: none"> Temperature (hyper and hypothermia); Types, Assessment, Management 	<ul style="list-style-type: none"> Lecture discussion Case discussions Supervised clinical practice 	<ul style="list-style-type: none"> Essay type Short answers Objective type

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			<ul style="list-style-type: none"> ▪ Sensorium (Unconsciousness); Assessment, Management ▪ Urinary Elimination (retention and incontinence); Assessment Management ▪ Functioning of sensory organs: (Visual & hearing impairment) ▪ Assessment of Self-Care ability ▪ Communication Methods and special considerations ▪ Mobility (physically challenged, cast), assessment of Self-Care ability: Communication Methods and special considerations ▪ Mental state (mentally challenged), assessment of Self-Care ability ▪ Communication Methods and special considerations ▪ Respiration (distress); Types, Assessment, Management ▪ Comfort –(Pain)- Nature, Types, Factors influencing Pain, Coping, Assessment, Management; • Treatments related to gastrointestinal system: nasogastric suction, gastric irrigation, gastric analysis. 		

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
XV	5	Explain care of terminally ill patient	Care of Terminally ill patient <ul style="list-style-type: none"> • Concepts of Loss, Grief, grieving Process • Signs of clinical death • Care of dying patient: special considerations <ul style="list-style-type: none"> ▪ Advance directives: euthanasia, will, dying declaration, organ donation etc. • Medico-legal issues • Care of dead body: equipment, procedure and care of unit • Autopsy • Embalming 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Case discussion/Role play • Practice session • Supervised Clinical practice 	<ul style="list-style-type: none"> • Essay type • Short answers • Objective type
XVI	6	Explain the basic concepts of conceptual and theoretical models of nursing	Professional Nursing concepts and practices <ul style="list-style-type: none"> • Conceptual and theoretical models of nursing practice: Introduction to models- holistic model, health belief model, health promotion model etc. • Introduction to Theories in Nursing; Peplau's, Henderson's, Orem's, Neuman's, Roger's and Roy's • Linking theories with nursing process 	<ul style="list-style-type: none"> • Lecture discussion 	<ul style="list-style-type: none"> • Essay type • Short answers

PSYCHOLOGY

Placement: First year

Time: Theory 60 Hours

Course Description: This course is designed to assist the students to acquire knowledge of fundamentals of psychology and develop an insight into behaviour of self and others. Further it is aimed at helping them to practice the principles of mental hygiene for promoting mental health in nursing practice.

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
I	2	Describe the history, scope and methods of psychology.	Introduction: <ul style="list-style-type: none"> History and origin of science of psychology Definitions & Scope of Psychology Relevance to nursing Methods of Psychology 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Essay type Short answers
II	4	Explain the biology of Human behaviour	Biology of behaviour <ul style="list-style-type: none"> Body mind relationship modulation process in health and illness Genetics and behaviour: Heredity and environment Brain and behaviour: Nervous System, Neurons and synapse, Association Cortex, Rt. and Lt. Hemispheres Psychology of Sensations Muscular and glandular controls of behaviour Nature of behaviour of an organism/Integrated responses 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Essay type Short answers
III	20	Describe various cognitive processes and their applications	Cognitive processes <ul style="list-style-type: none"> Attention: Types, determinants, Duration & degree, alterations Perception: Meaning, Principles, factors affecting, Errors, Learning: Nature, Types, learner and learning, Factors influencing, laws and theories, process, transfer, study habits Memory: Meaning, Types, Nature, Factors influencing, 	<ul style="list-style-type: none"> Lecture discussion Sychometric assessment: Practice sessions 	<ul style="list-style-type: none"> Essay type Short answers

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
			Development, Theories & methods of memorizing and Forgetting <ul style="list-style-type: none"> Thinking: Types and levels, stages of development, Relationship with language and communication Intelligence: Meaning, classification, uses, theories Aptitude: Concept, types, Individual differences and variability Psychometric assessments of cognitive processes Alterations in cognitive processes Applications 		
IV	8	Describe motivation, emotions, stress, attitudes and their influence on behaviour	Motivation and Emotional Processes: <ul style="list-style-type: none"> Motivation: Meaning, Concepts, Types, Theories, Motives and behaviour, Conflicts and frustration, conflict resolution Emotions & stress <ul style="list-style-type: none"> Emotion: Definition, components, changes in emotions, theories, emotional adjustments, emotions in health and illness Stress: stressors, cycle, effect, adaptation & coping Attitude: Meaning, nature, development, factors affecting, <ul style="list-style-type: none"> Behaviour and attitudes Attitudinal change Psychometric assessments of emotions and attitudes Alterations in emotions Applications 	<ul style="list-style-type: none"> Lecture discussion Role plays Case Discussion Demonstration 	<ul style="list-style-type: none"> Essay type Short answers
V	7	Explain the concepts of personality and its influence on behaviour	Personality <ul style="list-style-type: none"> Definitions, topography, types, Theories Psychometric assessments of Personality Alterations in personality Applications 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Essay type Short answers

Unit	Time (Hrs)	Learning Objectives	Content	Teaching Learning Activities	Assessment methods
VI	7	Describe psychology of people during the life cycle	Developmental Psychology <ul style="list-style-type: none"> Psychology of people at different ages from infancy to old age Psychology of vulnerable individuals-challenged, women, sick, etc. Psychology of groups 	<ul style="list-style-type: none"> Lecture discussion Case Discussion 	<ul style="list-style-type: none"> Essay type Short answers
VII	8	<ul style="list-style-type: none"> Describe the characteristics of Mentally healthy person Explain ego defence mechanisms 	Mental hygiene and Mental Health <ul style="list-style-type: none"> Concepts of mental hygiene and mental health Characteristics of mentally healthy person Warning signs of poor mental health Promotive and Preventive mental health-strategies and services Ego Defence mechanisms and implications Personal and social adjustments Guidance and counselling Role of nurse 	<ul style="list-style-type: none"> Lecture discussion Case Discussion Role play Demonstration 	<ul style="list-style-type: none"> Essay type Short answers
VIII	4	Explain the Psychological assessments and role of nurse	Psychological assessment & tests <ul style="list-style-type: none"> Types, development, Characteristics, Principles, Uses, Interpretations and Role of nurse in psychological assessment 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice sessions 	<ul style="list-style-type: none"> Assessment of practice

MICROBIOLOGY

Placement: First Year

Time: Theory-60 Hours (Theory 45+15 lab)

Course Description: This course is designed to enable students to acquire understanding of fundamentals of Microbiology and identification of various micro-organisms. It also provides opportunities for practicing infection control measures in hospital and community settings.

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
I	5		Explain concepts and principles of microbiology and their importance in nursing.	Introduction: <ul style="list-style-type: none"> Importance and relevance to nursing Historical perspective Concepts and terminology Principles of microbiology 	<ul style="list-style-type: none"> Lecture discussion 	<ul style="list-style-type: none"> Short answers Objective type
II	10	5	<ul style="list-style-type: none"> Describe structure, classification morphology and growth of bacteria Identify Micro-organisms 	General characteristics of Microbes <ul style="list-style-type: none"> Structure and classification of Microbes Morphological types Size and form of bacteria Motility Colonization Growth and nutrition of microbes <ul style="list-style-type: none"> Temperature Moisture Blood and body fluids Laboratory methods for Identification of Micro-organisms Staining techniques, Gram staining, Acid fast staining, Hanging drop preparation Culture; various medias 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Short answers Objective type
III	10	2	<ul style="list-style-type: none"> Describe the methods of infection control Identify the role of nurse in hospital infection control programme 	Infection control <ul style="list-style-type: none"> Infection: Sources, portals of entry and exit, transmission Asepsis Disinfection; types & methods Sterilization; Types & methods Chemotherapy and antibiotics Standard safety measures Biomedical waste management Role of Nurse Hospital acquired infection Hospital infection control programme 	<ul style="list-style-type: none"> Lecture discussion Demonstration Visits to CSSD Clinical practice 	<ul style="list-style-type: none"> Short answers Objective type

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
				<ul style="list-style-type: none"> ▪ Protocols, collection of samples, preparation of report and status of rate of infection in the unit/ hospital, nurse's accountability, continuing education etc. 		
IV	12	4	Describe the different disease producing organisms	Pathogenic organisms <ul style="list-style-type: none"> • Micro-organisms <ul style="list-style-type: none"> ▪ Cocci – gram positive and gram negative ▪ Bacilli– gram positive and gram negative ▪ Spirochaete ▪ Mycoplasma ▪ Rickettsiae ▪ Chlamydiae • Viruses • Fungi -Superficial and Deep mycoses • Parasites • Rodents & vectors Characteristics, Source, portal of entry, transmission of infection • Identification of disease producing micro-organisms • Collection, handling and transportation of various specimens 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Clinical practice 	<ul style="list-style-type: none"> • Short answers • Objective type
V	8	4	Explain the concept of immunity, hypersensitivity and immunization	Immunity <ul style="list-style-type: none"> • Immunity-Types, classification • Antigen and antibody reaction • Hypersensitivity – skin test • Serological tests • Immunoprophylaxis • Vaccines & sera -Types & Classification, storage and handling, cold chain • Immunization for various diseases • Immunization Schedule 	<ul style="list-style-type: none"> • Lecture discussion • Demonstration • Clinical practice 	<ul style="list-style-type: none"> • Short answers • Objective type

INTRODUCTION TO COMPUTERS

Placement: First Year

Time: Theory – 45 Hours (Theory 15 & Practical 30)

Course Description: This course is designed for students to develop basic understanding of uses of computer and its applications in nursing.

Unit	Time (Hrs)		Learning Objectives	Content	Teaching Learning Activities	Assessment methods
	Th.	Pr.				
I	3		<ul style="list-style-type: none"> Identify & define various concepts used in computer Identify application of computer in nursing 	Introduction: <ul style="list-style-type: none"> Concepts of Computers Hardware and software; trends and technology Application of computers in nursing 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Short answers Objective type
II	6	20	<ul style="list-style-type: none"> Describe and use the Disk Operating System Demonstrate skill in the use of MS Office 	<ul style="list-style-type: none"> Introduction to disk operating system <ul style="list-style-type: none"> DOS Windows (all version) Introduction <ul style="list-style-type: none"> MS-Word MS-Excel with pictorial presentation MS-Access MS-Power point 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice session 	<ul style="list-style-type: none"> Short answers Objective type Practical Exam
III	2	3	<ul style="list-style-type: none"> Demonstrate skill in using multi-media Identify features of computer aided teaching and testing 	<ul style="list-style-type: none"> Multimedia; types & uses Computer aided teaching & testing. 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Short answers Objective type Practical Exam and Viva-Voce
IV	1	3	<ul style="list-style-type: none"> Demonstrate use of internet and E-mail 	<ul style="list-style-type: none"> Use of Internet and: e-mail 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice Session 	<ul style="list-style-type: none"> Short answers Objective type Practical Exam and Viva-Voce
V	2	2	<ul style="list-style-type: none"> Describe and use the statistical packages 	<ul style="list-style-type: none"> Statistical packages: types and their features 	<ul style="list-style-type: none"> Lecture discussion Demonstration Practice Session 	<ul style="list-style-type: none"> Short answers Objective type Practical Exam and Viva-Voce
VI	1	2	<ul style="list-style-type: none"> Describe the use of Hospital Management System 	<ul style="list-style-type: none"> Hospital Management System: Types and uses 	<ul style="list-style-type: none"> Lecture discussion Demonstration 	<ul style="list-style-type: none"> Short answers Objective type Practical Exam and Viva-Voce